

PAPUAN DIPTERA. I.

FAMILY DIOPSIDAE.

By J. R. MALLOCH, Arlington, Va.

(Communicated by Frank H. Taylor, F.R.E.S., F.Z.S.)

[Read 30th November, 1938.]

There are many species of this family known from Southern Asia, the East Indies, Asia and Africa, and one common in North America. The only species in this collection was originally described from Celebes.

PSEUDODIOPSIS Hendel.

Deut. Ent. Zeit., 1917, 33; Curran, *Fam. Gen. N. Amer. Dipt.*, 1934, 359 and 495 (*Microdiopsis*).

Hendel proposed this new generic concept for the reception of *Sphyracephala* (?) *cothurnata* Bigot. Curran distinguishes it from *Sphyracephala* Say by "the longer eye-stalks, with the antennae close to the eyes, no bristle on the middle of the stalk, no appendage at bend of the fifth vein, etc."

An examination of the female before me shows that the antennae are not nearer to the eyes than in *brevicornis* Say, the type species of *Sphyracephala*, the eye-stalks are longer, the head being at least twice as wide as the thorax at level of wing bases, there is a fine hair-like bristle close to the eye-margin though farther forward than it ought to be if it were a vertical, the epistome is regularly rounded. I can detect no short sternopleural spine or process mentioned by Curran, but there is a stout spine or process on the metapleura that is thick at base, tapered apically, where it is as thick as the scutellar processes, and barely half as long as the latter. Possibly there is an error in Curran's statement, sternopleura being given instead of metapleura. As a matter of fact the only characters that might appear to warrant the segregation of the species from *Sphyracephala* are the lack of the four long vertical bristles on the frons, and the absence of the part of the fifth wing-vein beyond the outer cross-vein. The last character is quite variable in some related families.

The two concepts are distinguished from others in the family by the development of the anal vein beyond the apex of the anal cell, and the presence of a well-developed alula on the anal angle of the wing, both the free part of the anal vein and the alula being absent in other genera of the family as far as I know. How many other species placed in *Sphyracephala* have these two characters I am unable to say, but Osten-Sacken in 1882* associated *beccari* Rondani, *hearseyana* Westwood, and *nigrimana* Loew with the two under discussion in the genus *Sphyracephala*, on the basis of the two wing characters mentioned above.

This similarity of characters of the North American species and the one now in hand appears noteworthy in connection with faunal studies.

* *Berl. Ent. Zeitschr.*, vol. 26, p. 234.

PSEUDODIOPSIS COTHURNATA (Bigot).

Ann. Soc. Ent. France, 1874, p. 115, as *Sphyracephala* with a doubt.

This is a small shiny black species, with a yellow stripe across the face and anterior surface of the pedicels of the eyes, yellow antennae, the coxae, femora except their apices, and the tarsi except the basal segment of the fore pair, fulvous yellow, the bases of the tibiae brownish-yellow. Wings greyish-hyaline, veins dark, a fuscous cloud over the area between the inner and outer cross-veins and filling apical half of the discal cell, much narrower in the submarginal cell, that does not fully attain the costal margin, and a large fuscous apical mark. These wing markings are very similar to those of the genotype, but in the latter they are smaller, especially the apical mark.

The fore femora are much thickened and have some stiff, short ventral bristles in both species. Length, 5 mm.

Type locality, Celebes. One female, Papua: Mt. Lamington, Northern Division, May, 1927 (C. T. McNamara). From the Australian Museum.